



# **Reliance** DentaSonic

## User Manual

Rev.C



Section	Title	Page
<b>1</b>	<b>Introduction</b>	<b>4</b>
1-1	Memorandum of Registration	5
1-2	Important Safety Information	6
1-3	Trained Personnel	7
1-4	Introduction	8
<b>2</b>	<b>Installation</b>	<b>9</b>
2-1	Installation Requirements	10
2-2	Unpacking	11
2-3	Installation Instructions	12
2-3-1	Connecting the Medisafe Reliance DentaSonic Instrument Cleaner	12
2-3-2	Connecting the Medisafe Printer	13
2-3-3	Connecting to a Data Logging PC	13
<b>3</b>	<b>Operation</b>	<b>15</b>
3-1	Operating process	16
3-2	Identifying Controls	17
3-3	Rear Panel Layout	18
3-4	Operating Instructions	19
3-5	Operating a Wash Cycle	21
3-6	Error Messages	22
3-7	Printer Display	23
3-8	Advanced Functions	24
3-9	Emergency/Manual Lid Release	25

Section	Title	Page
<b>4</b>	<b>Technical</b>	<b>26</b>
4-1	Technical Specification	27
4-2	Routine Checks	29
4-3	Troubleshooting	31
4-4	Service Record	32
4-5	Warranty	33
4-6	Decontamination Guide	34
4-7	Decontamination Certificate	35



# **Reliance** DentaSonic

## Section 1: Introduction

Rev.C

**THIS MANUAL IS VALID ONLY FOR MEDISAFE RELIANCE DENTASONIC INSTRUMENT CLEANERS****Note to Person Installing this Product**

This Memorandum of Registration **MUST** be completed by the person undertaking installation and witnessed by the owner of the product.

**Note to Owner of this Product**

Be sure that this Memorandum of Registration is completed by the person undertaking to install the product. In the event of a Warranty Claim the information contained within this Registration is your evidence that the product has been correctly installed.

**Important Note:**

Failure to provide this evidence in the event of a warranty claim may result in the claim being rejected (this does not affect your statutory rights as a customer).

**Owner's Name:****Installation Address:****Installation Date:**

--	--	--	--	--	--	--	--

**Serial Number:**

--	--	--	--	--	--	--	--	--	--	--	--

**Software Version:**

--	--	--	--	--	--	--	--	--	--

**Installed by:****Service and Maintenance Requirements:**

The Medisafe Reliance DentaSonic Instrument Cleaner should be serviced on a regular basis to ensure that the product continues to perform in accordance with its design parameters. See Section 4-4: Service Record for further information.

**Product Identity**

The model and serial number are located on the silver label to the rear of the unit. The software version of the unit can be viewed on the Front Panel LCD Display for a 5 second period when the unit is first switched on.

**Electrical**

The power cord and connector supplied with this machine are wired according to the following colour code:

BLUE	Neutral
BROWN	Live
GREEN/YELLOW	Earth

If the supplied connector is removed, be sure to observe the colour code when reconnecting to an appropriate plug or fused spur.

For details of fuse replacement refer to Section 3-3: Rear Panel Layout.

**Important Note:**

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet.  
Refer servicing and repair to qualified personnel only.

**Installation and Maintenance:**

Observe the Routine Checks (Section 4-2) and Installation Instructions (Section 2-2) outlined within this manual.

**Intended Purpose:**

The product is designed to be used in conjunction with pH neutral aqueous cleaning fluids. It should not be used flammable materials or gases and should not be used for any purpose other than that defined by the manufacturer as the Intended Purpose (Section 1-4).

**Chemicals:**

This product contains a heating device and the use of substances or chemicals other than those specified may be hazardous. Never use toxic, corrosive, or flammable liquids.

Read the Chemical Safety Information provided with the chemical.

**Note:**

Using non-approved chemicals may cause damage to the machine and could void both your warranty and your guarantee of performance.

**Heat:**

The operation of this product can cause the water to be heated to elevated temperatures which may cause injury. Care must be taken when loading and unloading instruments after a cycle has been completed.

**Decontamination:**

This product MUST be decontaminated in accordance with local regulations before transporting. In the event that the product must be returned to the supplier, it is vital that the Decontamination Certificate (Section 4-7) of this manual is completed and returned with the product.

**Manufacturer Information:**

Medisafe UK Ltd  
The Snap Factory  
Twyford Road  
Bishop's Stortford  
Hertfordshire  
CM23 3LJ  
England

Telephone: +44 (0) 1279 461641  
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Web: [www.medisafeinternational.com](http://www.medisafeinternational.com)

The owner of this equipment has the responsibility for giving training and keeping records of training to the user.

The following table can be used for keeping training records

Date	Name	Signature

### Intended Purpose and Performance

The Medisafe Reliance DentaSonic Instrument Cleaner is principally intended to clean surgical instruments, and associated products. This is achieved through the use of ultrasonic energy.

Washing is achieved using a unique, specially formulated and clinically validated decontamination fluid (3E-Zyme®) which has to be introduced into the cycle before the program is commenced.

The Medisafe Reliance DentaSonic Instrument Cleaner has been designed to perform within strict and carefully controlled tolerances. A stringent quality control programme ensures that every unit is manufactured and tested under controlled conditions to ensure that all units perform identically.

### Declaration of Conformity:

The Medisafe Reliance DentaSonic Cannulated Instrument Cleaner is designed and manufactured in the UK by Medisafe UK Ltd. and complies with the essential requirements of the Medical Devices Directive 93/42/EEC (where appropriate).

### Service Contracts and Extended Warranty

### Packages:

Your Medisafe Reliance DentaSonic Instrument Cleaner is supplied with a conditional 12 month parts and labour warranty (Section 4-5) which is effective from the date of installation.

Medisafe offer a range of Service Contracts and Extended Warranty Packages which provide continued maintenance and breakdown cover once the original warranty has expired.

### Warning:

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

### For more information please contact:

Medisafe UK Ltd  
The Snap Factory  
Twyford Road  
Bishop's Stortford  
Hertfordshire  
CM23 3LJ  
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Telephone: +44 (0) 1279 461641  
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Web: [www.medisafeinternational.com](http://www.medisafeinternational.com)





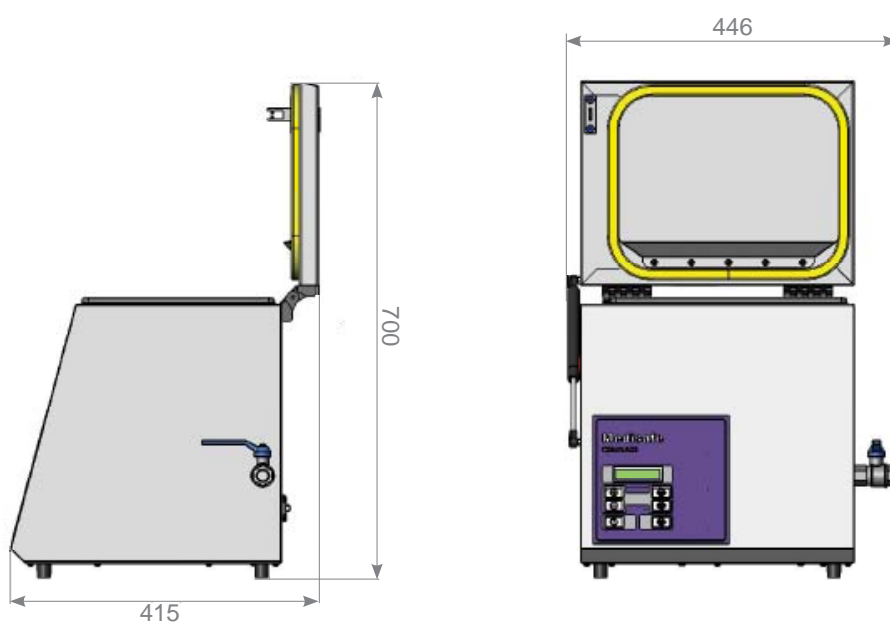


# **Reliance** DentaSonic

## Section 2: Installation

Rev.C

Installation	
The product must be unpacked and sited on a stable and level worktop capable of supporting a maximum weight of 50kgs and should be installed 50mm away from sides and minimum of 75mm from back walls for ventilation purposes . There should be enough free space provided near the machine for safe and effeicient maintaine in future.	
Electrical Supply	
Voltage & Frequency:	230V nominal (+/- 10%) @ 50Hz
Outlets:	2 outlets with total capacity of 13A
Position of outlets:	Within 1m of proposed installation
Method of disconnect:	Remove mains plugs
Water Quality & Temperature	
Hardness (CaCO <sup>3</sup> ):	<150ppm
Temperature:	Around 40 °C
Drainage System	
Type:	1 x 1½" dia. drain fitted with suitable traps
Position:	Below the level of work surface
Drainage Capacit:	> 20 l/min (Drain hose is supplied with the machine)
Printer shelf:	
Dimensions	230mm(W) x 280mm (D)
Position:	Above or to right of the machine and within 1000mm from the machine



## Unpacking

Carefully unpack your Medisafe Reliance DentaSonic Instrument Cleaner and retain the carton and all packaging materials. If the unit needs to be returned to the supplier for any reason then the original carton and packaging materials should be re-used \*\*

The unit is supplied with a range of accessories to enable easy installation and efficient operation. Ensure that all these items are present before attempting to install or operate the unit. Complete the following Enclosures Check List and notify your supplier of any shortages or damaged components as soon as possible.

### Enclosures Check List

- 1 Sample bottle 3E-Zyme®
- 1 Instrument basket
- 1 Owner's Manual

1 Plumbing kit comprising:

- drain hose adaptor
- 24 filters
- 1 Grey drain hose

## Replacement Parts and Consumables

A range of replacement parts and consumable items approved by Medisafe for use with the Reliance DentaSonic Instrument Cleaner may be purchased from your supplier. The use of these compatible Medisafe approved products will ensure the continued and reliable operation of your washer.

### 3E-Zyme® Detergent

(1 x 4 litre bottle)

Pt # MED8035

### Drain Filters

(1 x pack of 24)

Pt # MED3079

Using non-approved chemicals, accessories, and replacement parts may cause damage to the machine and could void both your warranty and your guarantee of performance.

\*\* Before transporting a used Medisafe Reliance DentaSonic Instrument Cleaner it is vital that all fluids are thoroughly drained. If the unit is being returned to your supplier or Medisafe UK Ltd. then the Decontamination Certificate MUST be completed and returned with the unit. The Certificate can be found in Section 4-7 of this manual.

### 2.3.1 Connecting the Medisafe Reliance DentaSonic Instrument Cleaner:

1. Unpack the machine and place it on a sturdy, level surface. The unit should be positioned within 1.83m of two 13A mains supply and, if possible, a suitable drain and hot and cold water supplies. For optimum operation and for personal safety it is recommended that a thermostatic mixing valve set at 40°C is used to provide the water for this product.

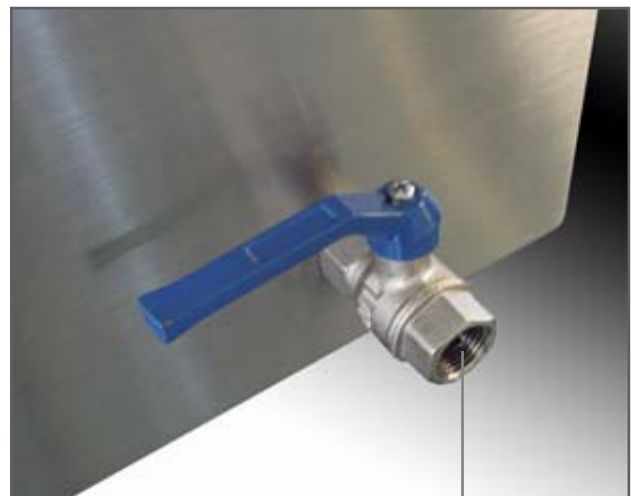
**Note:**

The mains plug is the disconnect method for the mains supply to the unit and should be readily accessible at all times.



Mains power cord IEC plug

2. Remove any protective packaging and loose items from inside the wash tank.
3. Identify the grey plastic, convoluted DRAIN HOSE supplied with the unit. The smallest end of the hose should be connected to the drain tap at the lower front, right hand side of the unit using the adaptor supplied. The larger end should be connected to a suitable drain which is below the level of the drain outlet on the unit or if temporary position the pipe can be placed in a sink (the grey pipe can easily be cut to length).
4. Open the bag containing the basket and plumbing kit.
5. Remove a drain filter from the packaging and insert into the drain orifice at the bottom of the wash tank.
6. Plug the 3 pin mains plug into a suitable switched outlet and switch on.



Attach threaded adaptor and DRAIN HOSE here

### 2.3.2 Connecting the Medisafe Printer:

1. Identify the RS232 Data Lead supplied with the unit. Connect one end to the data port on the lower rear panel of the unit.



Data Port

2. Connect the other end of the RS232 Data Lead to the connector on the rear of the printer.

Plug-top power supply



Data Port

Power Supply lead

3. Identify the plug-top power supply packed with the printer. Connect to socket on rear of printer and plug into a suitable mains supply outlet and switch on.
4. Turn printer on using the switch located on the left hand side.
5. Your Printer is now ready for use.

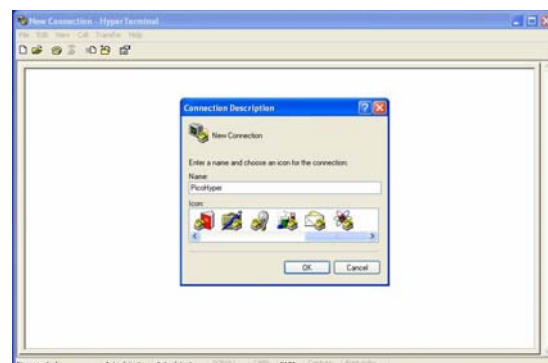
### 2.3.3 Connecting to a Data Logging PC.

The Reliance DentaSonic transmits data of a wash cycle from the serial port at a speed 2400 bits per second (8 data bits, no parity, 1 start bit, 1 stop bit, no handshaking). As an alternative to a printer, this data may be sent to a logging device or to a computer via the serial port COM1 or COM2 and Microsoft's Hyper Terminal program.

1. Connect one end of a suitable RS232 Null Lead to the data port on the lower rear panel of the unit.
2. Connect the other end of the RS232 Null Lead to the COM1 or COM2 port on the PC.
3. Locate the Hyper Terminal program in (Programs\Accessories\Communications\HyperTerminal) and click Hyper Terminal.

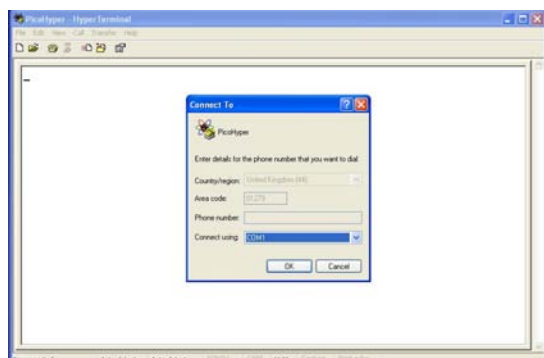


4. Enter name, e.g. "RelianceHyper", and select an icon from those provided. Click 'OK'.



5. By default, COM1 is selected as the

communications port. Click 'OK'.



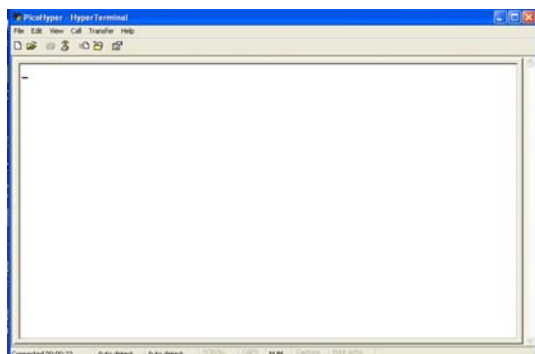
6. The name of the Hyper Terminal bar has changed to "RelianceHyper – Hyper Terminal" and you now have your own Hyper Terminal.

7. From the File menu, select Properties >> Settings >> Terminal Keys:

Ctrl+H is selected  
Emulation is set to "Auto Detect"  
Terminal ID is set to ANSI  
Buffer is set to 500  
Tick "append line feeds to receiving ends"  
Tick "wrap lines that exceed terminal width"  
Click 'OK' to accept port initialisation

8. From the Transfer menu, select Capture Text. The incoming data needs to be stored in a file so enter the name of a directory and filename, e.g., "C:\DigitalHyper\DataLog.txt" or browse around and find a suitable folder before adding the name of the file you want to save the data in. Click 'Start'.

9. The DigitalHyper Hyper Terminal is now ready and, if linked to an Reliance DentaSonic , will be receiving data.



10. When the DigitalHyper is closed, all received data will be saved in the DataLog file. Next time you use the Hyper Terminal, use the File menu and select Open. When you choose to open your Hyper Terminal (i.e., click "DigitalHyper"), go to the Capture Text menu and either enter a new file name for the data or retain the existing one, in which case new data will be appended to it. When you have made your choice, click 'Start' to begin receiving data when the Reliance DentaSonic is started.

```
Washer ID : 1H15526
Cycle No: 00083
Cycle start P1 14:06:35 17-08-05
Draining 14:06:35
Draining 14:06:43
```





# **Reliance** DentaSonic

## Section 3: Operation

Rev.C

When the wash tank is full, pressing the 'START' button will instigate a wash cycle.

**PRE-CYCLE CHECKS:** The following checks are made before the cycle is commenced.

#### Lid Lock

Reliance DentaSonic is fitted with an electronic lid lock to prevent opening the lid during the cycle. Cycle will not be commenced until the lid is closed and locked. Following message will be displayed if lid is not locked.



Please  
Close lid

#### Low Water Level:

A water level sensor mounted in the wash tank detects the water level. If this level is not reached during the manual filling process then the cycle is inhibited and the following screen is displayed.



Water Level Low  
Add Water

**WASH CYCLE:** Once these conditions have been satisfied then the cycle is allowed to continue.

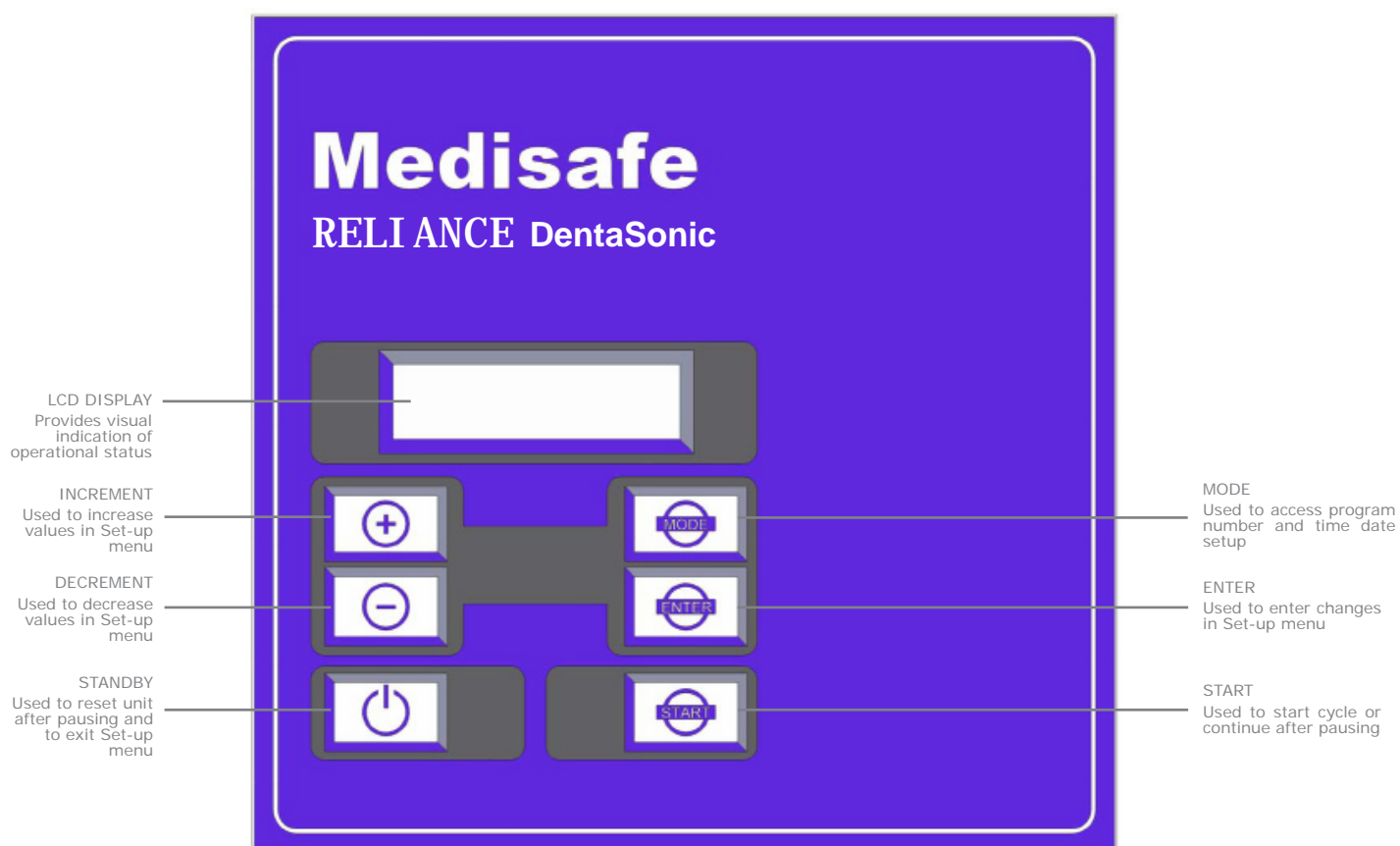
A temperature sensor is mounted directly below the wash tank records the water temperature. If this temperature falls below the default setting then the heater pads fitted to the sides of the wash chamber are activated to maintain the correct temperature.

**CYCLE Complete:** Once the count down timer expires the ultra sonics are disabled and the following screen is displayed on the LCD. The load can now be removed and a new load added or the water can be drained.

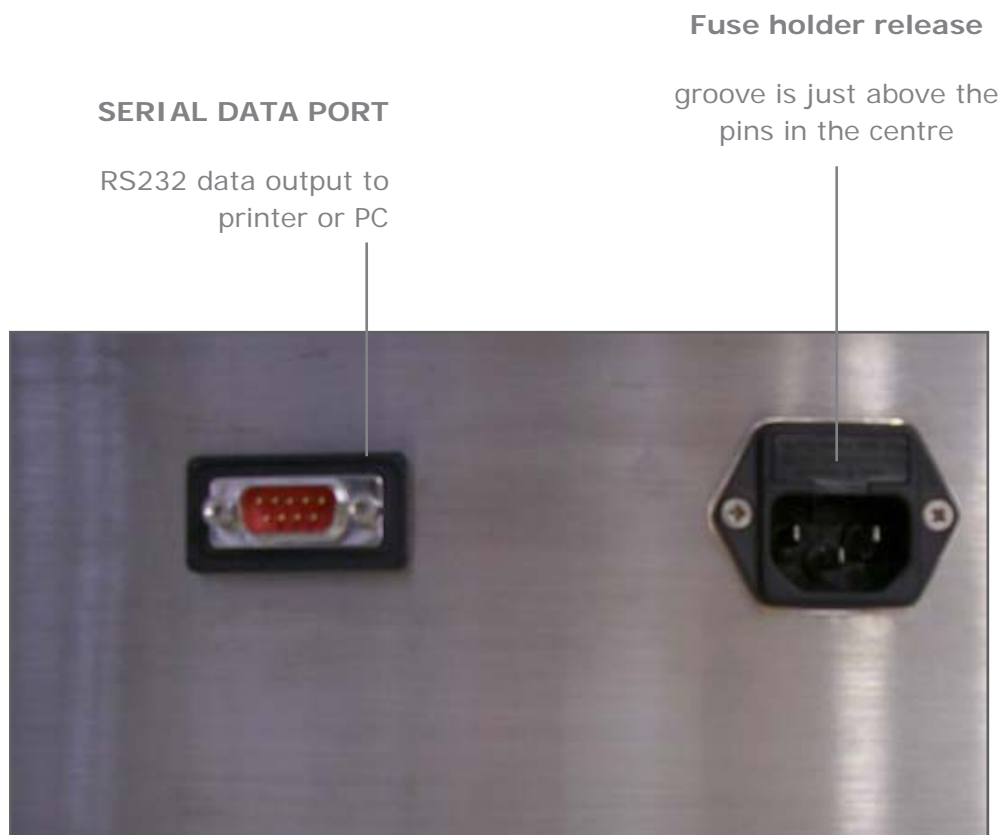


Unload  
Press START



**Front Panel Controls:**

## Rear Panel Layout



5 litre 2 x 3.15ampQB mains fuses 20mm

10 litre 2 x T5amp mains fuses 20mm

### Fuse Replacement:

1. Ensure that power supply to machine is disconnected.
2. Using a screwdriver, from below find the groove and lever out the fuse carrier.
3. Remove carrier complete with fuse.
4. Substitute damaged fuse with one of identical type and rating.
5. Replacement is a reversal of the above procedure.

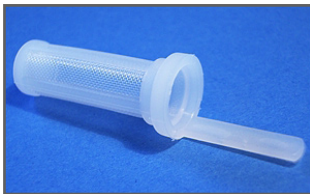
### Warning:

Isolate unit from mains supply before attempting to replace fuses

### Operating a Wash Cycle

Although your Medisafe Reliance DentaSonic Instrument Cleaner is simple to operate, it is advisable to read the following information carefully before attempting to operate the product. Please pay particular attention to the following points:

- It is essential that the checks and procedures detailed in Routine Checks (Section 4-2) are performed before EVERY operation.
- Your own personal safety is important and it must be remembered that contaminated surgical instruments are being handled when loading the unit. Follow the safe-handling recommendations applicable to your facility and the advice offered here on loading a basket.
- Ensure that a new drain filter is fitted into the drain at the bottom of the wash tank. This is to prevent small items getting trapped in the drain.



- Ensure that a correctly loaded basket is in the wash tank and that the basket is sitting squarely on the bottom of the wash tank (refer to page 20)
- Ensure that the drain tap is in the fully closed position.



Your Medisafe Reliance DentaSonic is now ready to use.

### Aborting a Wash Cycle

Occasionally it may be necessary to terminate a wash cycle before the cycle has been completed. This can be achieved by observing the procedure in Section 3-5: Operating a Wash Cycle.

#### Please note:

All paused or aborted cycles will be recorded by the printer.

### Changing Programme Parameters

Various parameters relating to the wash cycle may be programmed by the user. Details of these parameters and how to adjust them can be found in Section 3-8: Advanced Functions.

#### Beware:

The performance of this product is validated on the factory default settings at the time of installation.

### Error Messages

In the event of a mechanical fault or as a result of an operating anomaly, the front panel LCD will display a message to inform the operator of the error. Details of these parameters can be found in Section 3-6: Error Messages.

### Print-out Data

The optional printer supplied with this product is used to record key parameters during an operating cycle. A failure connected to ultrasonic activity will be recorded on the print-out after the cycle has completed. Details of such notifications can be found in Section 3-7: Printer Display.

### Loading a Basket in Preparation for a Wash Cycle

If not already in place, lower the basket into the wash tank

### Surgical Instruments and Accessories

Position items within basket according to the recommendations shown opposite.

### Degassing

It is highly recommended to run a 5 minute cycle as a degassing process before running a normal cycle.

### Important Information on Loading Instruments

**When loading instruments into basket be sure to observe the following precautions:**

**Do not** drop items into the empty wash tank as this could damage the ultrasonic transducers.

**Do not** place items to be cleaned directly into the wash tank or allow them to make contact with the sides of the tank.

**Do not** overload basket.

---

**Always** open box jointed instruments.

**Always** disassemble instruments which are designed to be taken apart

**Maximum Instruments load** not more than 1Kg

### Operating a wash cycle

1. Switch ON the machine from main electricity supply and machine will show the following on the LCD on front user panel.

Reliance PC+  
Model SID99210

2. If there is already water and machine shows the following message then go to point 8

3. Ready  
Press START

and

Ready 09:30  
Temperature 30C

4. If there is no water in the machine, then machine will show the following message

Ready  
Press START

5. Press "START"
6. The following message will be displayed

Load Instruments  
Press START

7. Add Water up to water level sensor point.
8. Load instruments in basket
9. Add detergent
10. press "START"
11. Following message will be displayed

Please  
Close Lid

12. Close the lid by pressing it down and lid

will be locked automatically.

13. The cycle will be commenced and following will be displayed on LCD

Washing 15:05  
Sonic 38°C

14. At the end of the cycle machine will show the following message with continuous bleep.

Unload  
Press START

15. Press "START" , the lid will be unlocked automatically. Remove all cleaned instruments.

16. Machine will show the following message

Ready 09:30  
Temperature 30C

17. Press "START" again and following will be displayed.

Load Instruments  
Press START

### Pausing or Aborting a Wash Cycle

1. Press 'STANDBY' button once. The following screen will be displayed:

Paused  
Press START

2. To resume cycle, press 'START' button once

Ready 12:28  
Press START

3. To abort cycle, press 'STANDBY' button once. The following screen will be displayed:

The following messages may appear on the LCD display if there is a problem which affects the wash cycle.

The following message will be displayed if the lid is not closed and locked properly and the cycle will not be allowed to start. If the lid is opened during a cycle, then the cycle will resume from the beginning when the lid is closed again.

Please note that there is a override key provided to open lid for emergency lid release.

Please  
Close lid

The following message will be displayed either:

- a) After the START button has been pressed and before the cycle wash has started to indicate that the water is below the level of the sensor and requires topping up.
- b) If the water level falls below the level of the sensor during the wash cycle. The lid will be unlocked automatically to add more

Water Level Low  
Add Water

water. When water reaches the water level sensor press "START" and closing the lid will automatically lock the lid.

The following message will be displayed during a wash cycle if:

- a) The mains power supply to the product has been disconnected.
- b) An internal fault caused one or more fuses to blow. If an electrical fault is suspected

Power Failure  
Program Aborted

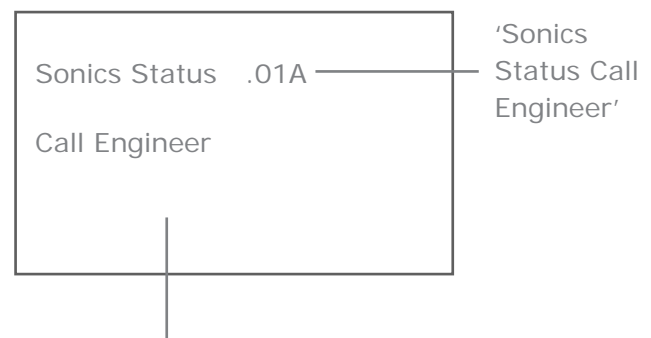
then consult a suitably qualified Engineer before attempting to operate the product again.

This message will be displayed at the end of the wash cycle if the ultrasonic control board has failed. The fault must be investigated and repaired by a suitably qualified Engineer.

Current Low  
Call Engineer

### Print-out

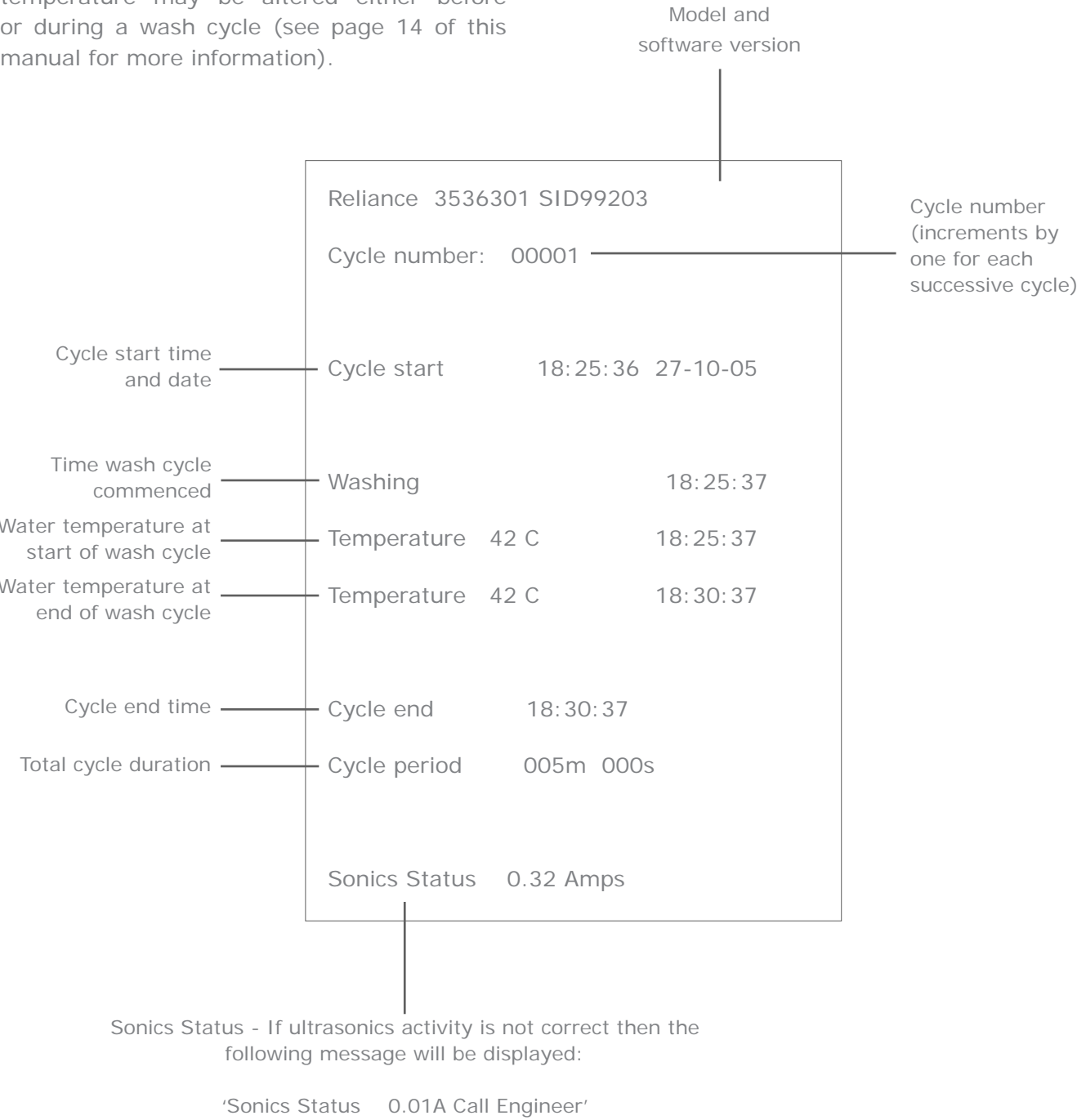
The following messages may appear on the print-out at the end of a wash cycle to indicate that there has been a problem which affected the efficacy of the wash cycle.



The output of the ultrasonics have fallen below the required minimum level and investigation is required by a suitably qualified Engineer

Information on Print-out

The printer supplied with your Reliance DentaSonic displays information relating to important elements of the wash cycle. Understanding the print-out is vital to ensure that each wash cycle achieves optimum performance. The sample print-out shown indicates a wash cycle which was pre-programmed for 5 minutes at a temperature of 42°C. The wash time and temperature may be altered either before or during a wash cycle (see page 14 of this manual for more information).



### Changing Cycle Parameters

The following parameters may be changed either before or during a wash cycle:

- Cycle duration: (3-25 mins)
- Wash temperature (16-54°C)
- Time & Date

To enter program mode from either stand-by position or during a cycle, press the 'MODE' button once. The following screen will be displayed:

Program	
Wash Time	10M

Press the '+' button to increase wash time or the '-' button to decrease wash time.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Program	
Temperature	40C

Press the '+' button to increase target wash temperature or the '-' button to decrease target wash temperature.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Time	00:00:00
Hour	11

Press the '+' button to increase hours or the '-' button to decrease hours.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Time	11:00:00
Minutes	08

Press the '+' button to increase minutes or the '-' button to decrease minutes.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Time	11:08:00
Seconds	45

Press the '+' button to increase seconds or the '-' button to decrease seconds.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Time	11:08:45
Day	28

Press the '+' button to increase day number or the '-' button to decrease day number.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Time	11:08:45
Month	10

Press the '+' button to increase month number or the '-' button to decrease month number.

Press the 'MODE' button once to move to next parameter. The following screen will be displayed:

Time	11:08:45
Year	05

Press the '+' button to increase year number or the '-' button to decrease year number.

Press the 'MODE' button once to scroll through parameters again

**OR**

Press the 'ENTER' button to accept changes and then press the 'STAND-BY' button once to return to cycle or to stand-by mode.



If the product fails to operate due to a fault with the electricity supply or stop operating during the cycle, then there is an override lid lock key is provided with the machine to manually unlock the lid.

### **Important**

Emergency lid lock key is purely designed for technicians and engineers and must be operated by the qualified Engineer/Technician. The instructions must be followed if lid is opened manually

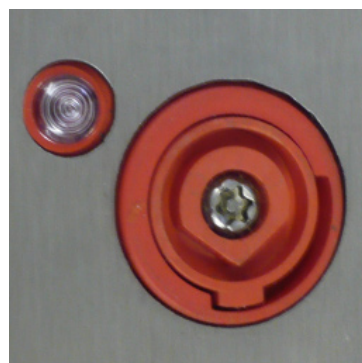
Make sure the inside machine temperature is not very hot. (to avoid burning the operator)

### **Procedure**

Place the lid lock key on lock and rotate the key anti-clockwise to unlock the key and rotating it clockwise will lock the lid.



Unlocked Lid lock



Locked Lid Lock

### **Note**

Lid lock should be in locked position (clockwise) to operate machine normally.



# **Reliance** DentaSonic

## Section 4: Technical

Rev.C

**General:**

Medisafe Part No: MED1800

Model: Medisafe Reliance  
DentaSonic  
Instrument Cleaner

Description: Medical Device Class I

Intended Purpose: External cleaning of  
surgical instruments and  
associated products

Operating Process: Ultrasonic activity

## Applied Standards:

BS2745: part 1: 1993  
BS2745: part 3: 1993  
EN60101-1: 2001(2nd Edition)  
EN61010-2-045 (2001)  
EN61326: 1997 A1: 1998  
EN980

**Wash Cycle Parameters:**

Min. Temp. During Cycle: determined by  
temperature of  
water used

Max. Temp. During Cycle: determined by  
temperature of  
water used

Vol. of Dispensed Chemicals: not applicable

Maximum Instruments load not more than 1Kg

**Required Services:***Electricity Supply:*

Supply Voltage: Single phase, 230V  
nominal (+/- 10%)  
@ 50Hz

Power Consumption: 540Va max  
(operational mode  
depending on model)  
0.5Va max.  
(stand-by mode)

Termination: 3 pin earthed Mains  
connection plug to  
IEC plug

Lead Length: 1.83m (6 feet)

*Drain:*

Discharge Orifice Type: 18mm outside  
dia. unthreaded  
hose tail

Max. Flow to Drain: 10 litres/min

Max. Temp. of Effluent: determined by  
temperature of  
water used

*Ventilation:*

Max. Heat Output of Load: determined by  
temperature of  
water used

**Chemicals:**

## Size and Nature of Containers:

3E-Zyme Fluid: 4 litre plastic bottle

## Storage Instructions:

3E-Zyme Fluid: Refer to Chemical Data  
provided with chemical

## Safe Handling Instructions:

3E-Zyme Fluid: Refer to Chemical Data  
provided with chemical

## Quantity Used per Cycle:

3E-Zyme Fluid: 7ml (approx) per litre of  
water

**Weight:**

Dry weight: 15 Kg

Operational weight: 25 kg

Shipping weight: 18 kg

**Dimensions:**

Wash Chamber Volume:

12240 cm<sup>3</sup>

Wash Chamber Dimensions:

30 cm (w)

17 cm (d)

24 cm (h)

Outer Cabinet Dimensions:

44.6 cm (w)

41.5 cm (d)

41.5 cm (h) with closed lid

70 cm (h) with open lid

Carton Dimensions:

39 cm (w)

48 cm (d)

47 cm (h)

**Important Note:**

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing and repair to qualified personnel only

To ensure that your Medisafe Reliance DentaSonic Instrument Cleaner continues to operate within its design parameters it is recommended that the following checks are performed on a regular basis.

Consulting the troubleshooting guide In Section 2-11 of this manual may prove useful when conducting the checks.

**Note:**

The completion of these checks is not a substitute for regular servicing and maintenance by a suitably qualified engineer.

**Before every cycle**

Perform the following procedure after each wash cycle:

- **Wipe water level sensor in tank**

Carefully wipe any excess moisture or dirt from the water level sensor using a lint free cloth, soft brush, or an alcohol impregnated swab.



- **Drain wash tank in the following way:**

Connect hose to drain tap and place other end into a suitable drain

Open tap on drain valve

Press and hold the 'speed drain' button on front, right-hand side of the unit until wash tank is empty

- **Clean lid seal:**

Wipe lid seal after every cycle with a disinfect cleaner and dry with it with a towel.

**Daily Checks**

The following checks should be performed daily:

- **Check cleanliness of all external surfaces**

The outside of the unit may be cleaned by wiping with a decontaminant wash

- **Check lid and lid seal**

The lid may be cleaned in the same way as the external surfaces

Ensure that lid can be removed and replaced without restriction

- **Check that the wash tank is clean and free from any deposits**

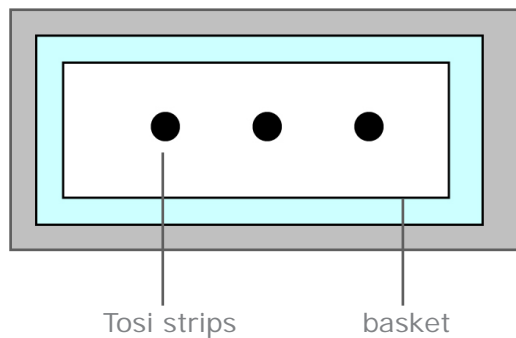
The wash tank may be cleaned by wiping with a decontaminant wash or suitable disinfectant

### Weekly Checks

The following checks should be performed every week:

- **Check cleaning efficiency of unit**

Run a normal wash cycle to de-gass (refer to Section 3-5: Operating a Wash Cycle), then place 3 TOSI (or equivalent) test strips in the wash basket, away from the corners, in the following positions. Secure in place using an appropriate method, i.e., nylon cable ties.



Run a wash cycle (refer to Section 3-5: Operating a Wash Cycle).

Check that test strip is cleaned with no red or clear residue remaining attached to the strip.

- **Check mains power cord**

Ensure that the mains power cord is not trapped or damaged.

Check that connector to the mains supply is secure.

### Fuse Replacement

If the unit should stop working for any reason, consult the Troubleshooting Guide in Section 4-3.

If a fuse replacement is necessary then see page 18.

#### **Warning**

Before replacing fused, machine must be switched OFF by removing the mains plug

## Troubleshooting

Use this basic guide to overcome any operational errors which may be encountered whilst using your Medisafe Reliance DentaSonic Instrument Cleaner. If the problem remains unresolved after consulting this guide then contact your supplier.

Problem	Possible cause(s) and Solution(s)
No display on front panel	<ul style="list-style-type: none"> <li>Check that unit is connected to a live mains supply</li> <li>Check that the fuses fitted in the fuse-holders located at the rear of the unit are intact (see page 8).</li> <li>(Note: for continued safe operation, always replace fuses with the same type and rating. If in doubt, consult a suitably qualified electrician or your Medisafe distributor)</li> </ul>
No ultrasonic activity	<ul style="list-style-type: none"> <li>Check that unit is switched on and in operational mode</li> <li>Check Flush Status on print-out and call engineer if advised</li> <li>Check that the water level is above the sensor (see lcd)</li> </ul>
Reduced performance	<ul style="list-style-type: none"> <li>Check that a genuine Medisafe basket is being used</li> <li>Check that basket feet are in place and making contact with bottom of tank.</li> <li>Ensure that instruments are laying flat in basket and not pointing up at lid or touching sides of wash tank</li> <li>If it is the first cycle of the day then run a cycle to "de-gas" the water this removes any dissolved gasses</li> <li>Check that genuine Medisafe 3E-Zyme (non-foam) wash chemical is being used at the correct dilution.</li> <li>Ensure that instruments are not excessively soiled</li> <li>Ensure that instruments are being cleaned within 2 hours of use</li> <li>Check the water is at the correct temperature for the detergent being used</li> </ul>
Tank requires excessive water to reach full mark	<ul style="list-style-type: none"> <li>Check that drain valve is not being held open by debris (seek advice or turn off unit)</li> </ul>
Unit fails to operate and display indicates "Please Close Lid"	<ul style="list-style-type: none"> <li>Ensure that lid is properly fitted and the black magnet is on the left and that loaded instruments are not preventing the lid from closing</li> </ul>

Medisafe recommend that your Reliance DentaSonic Instrument Cleaner is serviced in accordance with the schedule contained within the Reliance DentaSonic Instrument Cleaner at intervals of 3 months. This record should be completed by the Engineer conducting the Service and should be made available in the event of a warranty claim or breakdown repair.

**Note:**

No user serviceable parts inside. Service and repair should be referred to qualified persons only.

In the event that the product supplier (or Medisafe UK Ltd.) is not chosen to provide this service, Medisafe UK Ltd. can supply a detailed Service Manual on request.

3 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

6 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

9 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

12 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

15 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

18 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

21 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

24 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

27 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

30 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

33 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date

36 Month		
Serviced by/ Date		
Cycles since last service		
Next service due	Cycles	date



**PRODUCT WARRANTY**

To ensure continued efficiency and long operational life, your new Instrument Cleaner is covered by a one year warranty which is arranged and administered by Medisafe (UK) Ltd. Details of the warranty are explained in this section.

Subject to the following terms and conditions, Medisafe (UK) Ltd. warrants that any item of THE BASIC WARRANTY ITEMS of the unit (hereinafter called "new Instrument Cleaner") manufactured by Medisafe (UK) Ltd. shall be free from any defects in material and workmanship under normal use and maintenance.

Any item of THE BASIC WARRANTY ITEMS covered by the limited warranty will be repaired or replaced free of charge by Medisafe (UK) Ltd. or any distributor authorised by Medisafe (UK) Ltd. to act as their agent (hereinafter called "authorised Medisafe dealer or distributor").

**THE BASIC WARRANTY ITEMS**

THE BASIC WARRANTY ITEMS are any items (except THE SPECIFIC EXCLUDED ITEMS) of this new Instrument Cleaner which are warranted by an authorised Medisafe dealer or distributor within 12 months of the WARRANTY START DATE when this new Instrument Cleaner is first installed by or for you (the original purchaser) as set forth on the Memorandum of Registration.

THE BASIC WARRANTY ITEMS listed below are warranted within 12 months of the WARRANTY START DATE against defects in manufacture.

- solenoid valves
- electric motors and pumps
- switches
- electronic control circuits
- water heating elements
- ultrasonic transducers

**THE SPECIFIC EXCLUDED ITEMS**

THE SPECIFIC EXCLUDED ITEMS are any items of this new Instrument Cleaner which are not included in THE BASIC WARRANTY ITEMS and are therefore not subject to the terms and conditions of the PRODUCT WARRANTY.

Expendable items which will deteriorate and require replacement with normal use of the new Instrument Cleaner (for example: lid seal, water inlet filter element, various types of gaskets and hoses, lamp bulbs (if fitted), and other expendable parts not specifically listed)

Fair wear and tear of any part, normal maintenance service items, and the parts and any material used in connection with the new Instrument Cleaner.

Normal deterioration or damage to plated parts, paint coat, and rubber parts caused by daily wear and exposure to atmosphere and environment.

Minor irregularities not affecting quality, performance or function of the new Instrument Cleaner parts thereof (e.g. slight noise or vibration) or which appear only under particular abnormal conditions.

Damage caused by insufficient or improper maintenance (e.g. negligence of the daily, weekly, and monthly periodic inspections and any servicing requirements as described and specified within this manual).

Damage caused by using a part or lubricants not approved by an authorised Medisafe dealer or distributor or being repaired or replaced by a person who is not an authorised Medisafe dealer or distributor.

Damage caused by accident, abuse, or negligence of the proper handling as set out in this Owner's Manual, misuse of the new Instrument Cleaner, use of the new Instrument Cleaner under unusual conditions, and modifications of or to the new Sonic Irrigator or any component/parts thereof not recommended or approved by an authorised Medisafe dealer or distributor.

Damage caused by external influences such as chemical spillage, accident, fire, and disasters due to human fault or negligence or Act of God.

Damage to the external casing, wash chamber, load carriers, or any part of the new Instrument Cleaner which may come into contact with the load carrier during the process of loading/unloading the new Instrument Cleaner.

All charges incidental to breakdowns, such as loss of use of the new Instrument Cleaner, loss of time, inconvenience, telephone, transportation, loss or damage to personal property or loss of revenues, or other matter not specifically included.

Damage caused by incorrect installation of the new Instrument Cleaner which could cause operational failure or impairment either immediately after such installation or at any time within the period of this PRODUCT WARRANTY.

Medisafe (UK) Ltd. reserves the right of final decision on all manufacturers' warranty claims.

**Nothing herein affects the statutory rights of a consumer.**

All medical washers should be cleaned weekly as part of the routine maintenance for operator's Health and Safety, for the purposes of routine maintenance (PRIOR to the arrival of the engineer) and for transportation.

By decontamination, we refer to the unit being cleaned and disinfected.

Machines returned in an un-cleaned state WILL incur additional charges for cleaning and decontamination.

For the internal or external surfaces a disinfectant cleaner (e.g. Medisafe DISS-ALL - product code MED8051), or any household kitchen cleaner can be used providing it is marked as a DISINFECTANT CLEANER.

**Important safety information:**

All safety precautions recommended for the cleaning product used must be adhered to.

In all cases, the wearing of PPE, including gloves and eye-shields are strongly recommended.

Cleaning/decontamination                      general instructions.

Apply the chosen chemical onto a clean cloth or paper towel and wipe over the surfaces as mentioned below.

Rinse off with tap water on a cloth or paper

towel and dry.

For machines with a tank assembly (such as.....) the tank must be filled with clean water containing a 5% solution of household bleach (Sodium Hypochlorite) and then rinsed with clean water.

The internal area that is not immersed including the underside of the lid must also be disinfected.

All units must be drained down thoroughly prior to return.

**Note:**

By the nature of its operation, this washer disinfecter has a tank or chamber area that is immersed in water during all phases of the cleaning/disinfection cycle. Therefore the main tank/chamber should be clean and disinfected at the end of the cycle.

All that is required then is to clean and disinfect the outside surfaces, and around the sides of the door and door seals/hinges, as the normal wash process will not clean them.

If, however, due to the nature of any fault present, the unit cannot be run prior to return, the tank/chamber must be cleaned and decontaminated by hand following the process outlined in the notes above.

## DECONTAMINATION CERTIFICATE

ENSURE THAT ITEMS RETURNED TO YOUR SUPPLIER ARE  
DISINFECTED IN ACCORDANCE WITH THE APPROPRIATE HOSPITAL  
PROCEDURE FOR EQUIPMENT OF THIS TYPE

THIS FORM MUST BE COMPLETED AND ATTACHED TO THE OUTSIDE  
OF THE CARTON WHEN RETURNING THE PRODUCT TO YOUR  
SUPPLIER. WITHOUT THIS FORM BEING VISIBLE THE COURIER  
AND/OR YOUR SUPPLIER ARE AT LIBERTY TO REFUSE HANDLING OF  
THE PRODUCT.

**I hereby certify that the machine referred to in this  
document by model number and serial number has been  
disinfected in accordance with Hospital Procedure**

Model No: Reliance DentaSonic Instrument Cleaner

Serial No: \_\_\_\_\_

Hospital: \_\_\_\_\_

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



*Promoting a Clean and Safe Service*